

## Nooksack Basin - WRIA #1

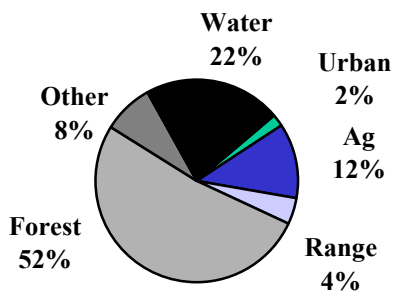


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IA #1 encompasses about 1,039,283 acres, with more than 1,000 miles of rivers and streams. The eastern third is mountainous and heavily forested. The western portion is a broad floodplain.

### Demographics

#### Land Use in Nooksack Basin



#### Land Base (in acres)

Federal	270,392	26%
State	102,758	9.9%
Local	302	.03%
Tribal	13,241	1.3%
Private	652,590	62.8%

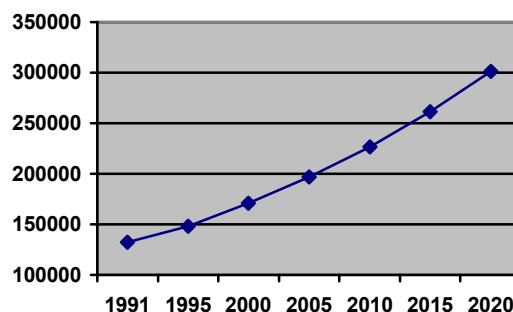
#### Principal economic activity (as total wages)

Agriculture/Forestry	4%
Manufacturing	15%
Retail Trade	22%
Services	25%
Government	15%

## Population

There are approximately 148,300 people living in the Nooksack River Basin. The primary population centers are Bellingham, Lynden, and Ferndale. The majority of people live in unincorporated areas.

#### Projected population trends



### Counties

Whatcom (94%)  
Skagit (6%)

### Special purpose districts

Conservation Districts: Whatcom; Skagit

Shellfish Protection Districts: Portage Bay Drayton Harbor

### Principal Cities

Bellingham      Ferndale  
Lynden            Blaine  
Everson           Sumas

### Reservation Lands

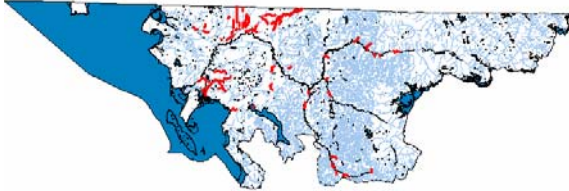
Lummi Tribe  
Nooksack Tribe

### General Landscape

Part of the Fraser lowlands, this WRIA has undulating glacial drift plains, terraces, and floodplains with low gradient meandering rivers and streams. Surface material is deep to moderately deep silt to sandy loam. Potential natural vegetation is western hemlock, western red cedar, and some red alder. Mean temperature ranges from 33/44° (winter) to 50/73° (summer).

# Surface Water Quality

## 303(d) Listed Waterbodies



### 1. 303(d) listed Problem Areas

**Fecal Coliform** in Anderson Ditch, Bellingham Bay, Bender Road Ditch, Benson Road Ditch, Bertrand Creek, Clearbrook Creek, Dakota Creek, Deer Creek, Depot Road Ditch, Double Ditch Drain, Drayton Harbor, Duffner Ditch, Fishtrap Creek, Johnson Creek, Kamm Slough, Lummi Bay and Hale Passage, Lummi River, Mormon Ditch, Nooksack River, Pangborn Creek, Silver Beach Creek, Silver Creek, Squaw Creek, Sumas Creek, Sumas River, Tennant Creek, Unnamed Creek, unnamed creek WDF 01.0146, unnamed creek WDF 01.0148, and Whatcom Creek

**High Temperature** in Anderson Creek, Boulder Creek, Canyon Creek, Cavanaugh Creek, Cornell Creek, Gallop Creek, Hoff Creek, Howard Creek, Nooksack River, Racehorse Creek, Roaring Creek, and Whatcom Creek

**Dissolved Oxygen** in Anderson Ditch, Bender Road Ditch, Benson Road Ditch, Bertrand Creek, Clearbrook Creek, Dakota Creek, Deer Creek, Depot Road Ditch, Duffner Ditch, Grays Harbor County Drainage Ditch NO.1, Johnson Creek, Kamm Slough, Mormon Ditch, Pangborn Creek, Silver Creek, Squaw Creek, Sumas Creek, Tennant Creek, Unnamed Creek, unnamed creek WDF 01.0146, and Lake Whatcom

**pH** in Bellingham Bay, Deer Creek, Kamm Slough, Mormon Ditch, Pangborn Creek, and Squaw Creek

**Metals** in Bellingham Bay and Straight of Georgia

**Pesticides** in Bellingham Bay and Straight of Georgia

**Organics** in Bellingham Bay and Straight of Georgia

**Nutrients** in Bertrand Creek and Deer Creek

**Low Instream Flow** in Bertrand Creek, Fishtrap Creek, and Nooksack River

**PCBs** in Bellingham Bay and Straight of Georgia

**Sediment Bioassay** in Bellingham Bay and Straight of Georgia

**Fine sediments** in Anderson Creek, Howard Creek, Nooksack River, and Racehorse Creek

#### Total Maximum Daily Loads

10 TMDLs required from the 1998 303(d) list

### 2. Impacted Beneficial Uses

#### Groundwater Quality

Nitrates – Levels detected > 10mg/L

Pesticides – Detected in public wells

#### Sole Source Aquifer

None

#### Water Quantity

Over appropriated; high growth

#### Air Quality

(From windblown dust)

No concerns

#### Public Health

#### Commercial Shellfish Growing Areas

Areas threatened and impaired

#### Domestic Water Supply

Within this WRIA are large community water systems that significantly utilizes surface water sources

#### Salmonid Stock Status

Threatened

### **3. Water Quality Programs in WRIA #1**

1. TMDL for Bellingham Bay
2. TMDL for Lake Whatcom
3. TMDL for Whatcom Creek
4. TMDL for Nooksack River
5. TMDL for Fishtrap Creek
6. TMDL for Johnson Creek
7. TMDL for Sumas River
8. US Forest Service Northwest Forest Plan
9. City of Blaine, Everson, Ferndale, Lynden, Nooksack, and Sumas Stormwater Plans
10. Silver Creek, Ten-mile Creek, Kamm Creek, and Drayton Harbor Watershed Plans
11. Lake Whatcom Restoration Plan
12. On-site Sewage System Program, Whatcom County Health
13. Whatcom County Shellfish Protection Implementation Program, Whatcom CD
14. Stream Team, Whatcom CD
15. Water Quality Education Program,
16. Small Farm Education Program, Whatcom CD
17. Dairy Nutrient Management Planning Program, Whatcom CD
18. Environmental Quality Incentive Program, Whatcom CD
19. Dairy Nutrient Cost Share Program, Whatcom CD
20. 6<sup>th</sup> Grade Conservation Program, NRCS
21. Chuckanut Bay On-Site/Shellfish Project, Whatcom County Health
22. Shoreline Inventory of Whatcom County, Whatcom County Marine Resources Committee
23. Rapid Shoreline Inventory Program, People for Puget Sound
24. NWSC Nearshore Habitat Inventory & Evaluation, Northwest Straits Commission
25. Fecal Coliform & Paralytic Shellfish Poisoning Monitoring (Puget Sound Ambient Monitoring Program – PSAMP), DOH
26. Salmon & Steelhead Inventory & Assessment Program, WDFW
27. Washington State ShoreZone Inventory, DNR/Coastal & Ocean Resources
28. Estuarine Health Indicator Project, PSWQAT
29. Biotoxins Monitoring Program, DOH
30. Commercial Shellfish Growing Area Classification Program, DOH
31. Recreational Shellfish Program, DOH